(1) **Windows or Mac?** A recent survey of 85 Holy Cross students indicated that 68 have an Apple laptop / iPad. We are looking to test the claim that $2/3$ of students use an Apple product.

     (a) State an appropriate null and alternative hypothesis.

     (b) Conduct a Wald test using the $\chi^2$ distribution to compute a $p$-value. At the 1% level of significance, is there sufficient evidence to conclude that the proportion of students with an Apple product is not $2/3$?

     (c) Perform the same analysis as in part (b), but this time using a score test.

(d) Perform the same analysis as in part (b), but this time using a likelihood ratio test.